

HJ.

TEMPORAL LOBE RESEARCH PROJECT

Intellectual functions and
 Title: Mental disorders associated with epileptogenic lesions of the temporal lobe.

Purpose: To make an intensive study of the function of the temporal lobe in man with special reference to the following:

1. Memory and amnesia.
2. Illusions of perception.
3. Delusions and hallucinations.
4. Dreams
5. Intellectual functions (according to general psychological assessment as well as tests of special functions, e.g. visual discrimination, form perception, etc.)
6. Speech and language functions.
7. Affective behavior (mood disorders *and emotional reactions*)
8. Interpersonal relationships (behavior in relation to others, impulsive outbursts, ~~etc.~~ aggressiveness, dependence, etc.)
9. Functional anatomy of the temporal region as determined by direct electrical stimulation and recording of electrical activity.
10. Electrophysiological studies consisting of
 - (a) pre-operative EEG studies combined with cinematographic analysis of seizure patterns and
 - (b) experimental studies in animals to analyze functional connections of temporal lobe, particularly with subcortical structures.

II. Effects of excision.

Case Material: Patients with epileptic seizures of origin within the temporal region will form the major group for study. Control studies of patients with seizures arising in the frontal lobe and in other cortical areas will be included. Psychiatric patients at the Verdun Protestant Hospital will be examined when necessary for comparison of chronic mental disorders with episodic conditions seen in patients with temporal lobe seizures.